Addendum 1 to Final Report on X-ray Fluorescence Field Study Of Selected Properties in Vicinity of Former USS Lead Refinery Facility, East Chicago, Indiana, June 14, 2004

Table 2. Evaluation of Results from Calibration of XRF Instrument with Standard Reference Material (SRM) 2711

Sample Date	XRF Calibration Results for Lead (milligrams/kilogram)					
	SRM 2711 AM	Calibration range met	% Difference * AM	SRM 2711 PM	Calibration range met	% Difference * PM
7/23/03	1040 + 47.2	Low	10.5	No Reading	Unknown	N/A
7/24/03	1089.6 + 44.5	✓	6.2	1069.6 + 47.9	Low	8.0
7/29/03	1109.6 + 48.5	✓	4.5	1089.6 + 48.6	✓	6.2
7/30/03	1069.6 + 47.3	Low	8.0	1129.6 + 48.8	✓	2.8
7/31/03	1120 + 39.3	✓	3.6	1060 + 45.6	Low	8.8
8/5/03	1089.6 + 46.6	✓	6.2	1000 + 45.3	Low	13.9
8/6/03	1100 + 43.5	1	5.3	1100 + 44.4	√	5.3
8/7/03	1100 + 48.5	✓	5.3	1120 + 38.6	✓	3.6
8/10/03	1069.6 + 45.7	Low	8.0	1049.6 + 44.5	Low	9.7

XRF = X-Ray Fluorescence

SRM 2711 = Standard Reference Material 2711, Montana Soil with Moderately Elevated Trace Element Concentrations

Each XRF result for SRM 2711includes a concentration value and associated reading error. The SRM calibration data was reported in Appendix E to Final Report on X-ray Fluorescence Field Study Of Selected Properties in Vicinity of Former USS Lead Refinery Facility, East Chicago, Indiana, June 2004.

SRM 2711 Certified Value for Lead was reported as **1162 <u>+</u> 31 mg/kg**; XRF Results are expected to be biased low if XRF Screening Results plus error is less than 1131 mg/kg.

* % Difference is calculated as [|(SRM Certified Value - XRF Reading)|/SRM Certified Value * 100% = % Difference]

AM and PM are reading time designations